**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1) (Currently Amended) Coded data for disposal on or in an interface surface associated with a product item, the coded data being indicative of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data includes a plurality of coded data portions disposed on or in the interface surface, each coded data portion being indicative of an identity of the product item, wherein each coded data portion is provided at a respective position on the interface surface, and wherein each coded data portion includes data that is indicative of the respective position.

2) (Original) The coded data of claim 1, wherein the coded data includes a number of codewords arranged in accordance with the at least one layout.

3) (Original) The coded data of claim 2, wherein each sub-layout has at least one codeword that is at least one of:

   (a) identical to at least one codeword of at least one other sub-layout; and,

   (b) different to at least one codeword of at least one other sub-layout.

4) (Original) The coded data of claim 2, wherein each sub-layout has at least one codeword formed from a number of data elements, each sub-layout defining the positions of the data elements within the layout.

5) (Original) The coded data of claim 4, the sub-layouts being arranged such that each data element has a unique position.

6) (Original) The coded data of claim 4, the positions of the data elements of respective sub-layouts being interleaved.

7) (Original) The coded data of claim 1, wherein the coded data is arranged in accordance with a plurality of layouts, each layout including product identity data indicative of the identity of the product item.

8) (Original) The coded data of claim 7, wherein the layouts are arranged in accordance with a super-layout.

9) (Original) The coded data of claim 8, wherein the layouts are arranged such that there is a predetermined spacing between adjacent layouts in the super-layout.

10) (Original) The coded data of claim 7, wherein the layouts are arranged such that the layouts are tiled over a substantial portion of the interface surface.

11) (Original) The coded data of claim 10, wherein the layouts are arranged to tessellate over the interface surface.

12) (Original) The coded data of claim 7, wherein each layout has at least one of the following shapes:

(a) linear;

(b) square;

(c) rectangular;

(d) triangular; or

(e) hexagonal.

13) (Original) The coded data of claim 7, wherein each layout has at least one codeword that is at least one of:

(a) identical to at least one codeword of at least one other layout; and,

(b) different to at least one codeword of at least one other layout.

14) (Original) The coded data of claim 1, wherein the at least one layout includes at least one target feature.

15) (Original) The coded data of claim 14, wherein the at least one target feature is used to determine at least one of:

(a) a position of the at least one layout;

(b) a perspective of the at least one layout with respect to a sensing device; and,

(c) a rotation of the at least one layout.

16) (Original) The coded data of claim 14, wherein each layout includes at least four target features.

17) (Original) The coded data of claim 14, wherein the coded data includes a plurality of layouts, at least some target features being common to at least two layouts.

18) (Cancelled)

19) (Currently Amended) The coded data of claim 18, wherein each coded data portion is arranged in accordance with a respective layout.

20) (Currently Amended) The coded data of claim 18, wherein the interface surface includes a number of regions, and wherein each region includes at least one coded data portion indicative of an identity of the region.

21) (Cancelled)

22) (Original) The coded data of claim 1, wherein the coded data is indicative of at least one of:

(a) a first identifier indicative of a class of products; and

(b) a second identifier indicative of the respective product item.

23) (Original) The coded data of claim 22, wherein the first identifier is indicative of at least one of:

(a) a manufacturer number indicative of at least one manufacturer; and,

(b) a product class number indicative of a type of the product item.

24) (Original) The coded data of claim 23, wherein the first identifier is a UPC.

25) (Currently Amended) The coded data of claim ~~21~~23, wherein the second identifier is a serial number indicative of the respective product item.

26) (Original) The coded data of claim 1, wherein the coded data is indicative of an EPC associated with the product item.

27) (Original) The coded data of claim 26, wherein the EPC includes:

(a) a manufacturer number indicative of at least one manufacturer;

(b) a product class number indicative of type of the product item; and

(c) a serial number indicative of the respective product item.

28) (Original) The coded data of claim 1, wherein the coded data distinguishes the product item from every other product item.

29) (Original) The coded data of claim 1, wherein the coded data is redundantly encoded.

30) (Original) The coded data of claim 29, wherein the coded data is redundantly encoded using Reed-Solomon encoding.

31) (Original) The coded data of claim 1, wherein the coded data is substantially invisible to the unaided eye.

32) (Original) The coded data of claim 1, wherein the coded data is printed using infrared ink.

33) (Original) The coded data of claim 1, wherein the coded data is provided on the interface surface coincident with visible markings representing at least one of:

(a) product information; and,

(b) the identity of the product item.

34) (Original) The coded data of claim 1, wherein the interface surface is at least a portion of at least one of:

(a) product item packaging;

(b) product item labelling;

(c) product manuals;

(d) product instructions; and,

(e) a surface of the product item.

35) (Original) The coded data of claim 1, wherein the coded data is disposed over at least one of:

    (a) substantially all of any one of:

        (i)     an entire product surface;

        (ii)    packaging; and,

        (iii)   a product label;

    (b) more than 25% of any one of:

        (i)     an entire product surface;

        (ii)    packaging; and,

        (iii)   a product label;

    (c) more than 50% of any one of:

        (i)     an entire product surface;

        (ii)    packaging; and,

        (iii)   a product label;

    (d) more than 75% of any one of:

        (i)     an entire product surface;

        (ii)    packaging; and,

        (iii)   a product label;

36) (Original) The coded data of claim 1, wherein, in use, the coded data is sensed by a sensing device, and wherein the sensing device is responsive to the sensed coded data to determine product identity data indicative of the product item identity.

37) (Original) The coded data of claim 1, wherein the coded data is provided at respective positions on the interface surface, and wherein the sensing device is responsive to sensing the coded data to determine position data indicative of at least one of:

    (a) a position of the sensing device with respect to the interface surface;

    (b) a position of the sensed coded data;

    (c) an orientation of the sensed coded data portion; and,

    (d) an orientation of the sensing device relative to the interface surface.

38) (Currently Amended) An interface surface for use with a product item, the interface surface including coded data disposed thereon or therein, the coded data being indicative

of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data includes a plurality of coded data portions disposed on or in the interface surface, each coded data portion being indicative of an identity of the product item, wherein each coded data portion is provided at a respective position on the interface surface, and wherein each coded data portion includes data that is indicative of the respective position.

39) (Cancelled)

40) (New) Coded data for disposal on or in an interface surface associated with a product item, the coded data being indicative of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data is indicative of at least one of:

(a) a UPC indicative of a class of products and a serial number indicative of the respective product item; and

(b) an EPC associated with the product item.

41) (New) An interface surface for use with a product item, the interface surface including coded data disposed thereon or therein, the coded data being indicative of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data is indicative of at least one of:

(a) a UPC indicative of a class of products and a serial number indicative of the respective product item; and

(b) an EPC associated with the product item.

42) (New) Coded data for disposal on or in an interface surface associated with a product item, the coded data being indicative of an identity of the product item, the coded data

being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data includes a number of codewords arranged in accordance with the at least one layout, wherein each sub-layout has at least one codeword formed from a number of data elements, each sub-layout defining the positions of the data elements within the layout and the positions of the data elements of respective sub-layouts being interleaved.

43) (New) An interface surface for use with a product item, the interface surface including coded data disposed thereon or therein, the coded data being indicative of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data includes a number of codewords arranged in accordance with the at least one layout, wherein each sub-layout has at least one codeword formed from a number of data elements, each sub-layout defining the positions of the data elements within the layout and the positions of the data elements of respective sub-layouts being interleaved.

44) (New) Coded data for disposal on or in an interface surface associated with a product item, the coded data being indicative of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data includes a plurality of coded data portions disposed on or in the interface surface, each coded data portion being indicative of an identity of the product item, and wherein the interface surface includes a number of regions, each region including at least one coded data portion indicative of an identity of the region.

45) (New) An interface surface for use with a product item, the interface surface including coded data disposed thereon or therein, the coded data being indicative of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the

layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data includes a plurality of coded data portions disposed on or in the interface surface, each coded data portion being indicative of an identity of the product item, and wherein the interface surface includes a number of regions, each region including at least one coded data portion indicative of an identity of the region.

46) (New) Coded data for disposal on or in an interface surface associated with a product item, the coded data being indicative of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data is redundantly encoded using Reed Solomon encoding.

47) (New) An interface surface for use with a product item, the interface surface including coded data disposed thereon or therein, the coded data being indicative of an identity of the product item, the coded data being arranged in accordance with at least one layout having $n$-fold rotational symmetry about a center of rotation, where $n$ is at least two, the layout including $n$ identical sub-layouts rotated $1/n$ revolutions apart about the center of rotation, at least one sub-layout including rotation-indicating data that distinguishes that sub-layout from each other sub-layout, wherein the coded data is redundantly encoded using Reed Solomon encoding.